

# SINGAPORE MATHEMATICS PROJECT FESTIVAL 2018

## RESULTS

### 1. JUNIOR SECTION

#### Silver Medal with Excellent Presentation.

School/Project Title	Supervisor/Student(s)
National Junior College	Tjhin Ke Ming
<i>Scrutiny of winners and tournaments</i>	<i>Allysa Tan Li Ying</i> <i>Cao Jialin Marianna</i>

#### Silver Medal.

School/Project Title	Supervisor/Student(s)
NUS High School of Mathematics and Science	Chia Vui Leong
<i>The problem of rooms</i>	<i>Alexander Goo Zong Han</i> <i>Oliver James Tan</i> <i>Paul Seow Jian Hao</i>

#### Bronze Medal.

School/Project Title	Supervisor/Student(s)
Hwa Chong Institution	Chen Zenghui
<i>The Buffon's needle problem</i>	<i>Phua Jun Kai</i> <i>Ong Eugene</i> <i>Wu Cheng Ye</i> <i>Lim Yi Lin</i>
Hwa Chong Institution	Wang Qian
<i>The poisoned wine problem</i>	<i>Tan Ler</i> <i>Tey Yi Fan</i> <i>Axel Tong</i> <i>Xie Kaiwen</i>
NUS High School of Mathematics and Science	Chai Ming Huang
<i>Number of self-avoiding walks for an <math>n \times m</math> grid</i>	<i>Audi Arif</i> <i>Chieu Le Heng</i> <i>Samuel Neo</i>
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**Bronze Medal.** (Continued)

School/Project Title	Supervisor/Student(s)
Hwa Chong Institution	Zong Lixing
<i>Monopoly geniuses</i>	Marcus Ng Chua Rui Hong Javier Chan Pierre Yeap
NUS High School of Mathematics and Science	Chai Ming Huang
<i>Bloxorz</i>	Li Yue Chen Lim Rui Yuan Vishal Mohanty
NUS High School of Mathematics and Science	Jiang Zewei
<i>Analyzing Fibonacci sequence by big data technologies</i>	Trivikram Mohan Yen Jun Hung
Methodist Girls' School	Karen Chia
<i>The sky is not the limit — infinity is</i>	Christie Tang Su-Wei Lauren Yeo Jen-Yin Li Ai Shin Celeste Shannon Leung Fee Ming

**Honourable Mention.**

School/Project Title	Supervisor/Student(s)
Hwa Chong Institution	Wang Qian
<i>House of math</i>	Calen Tang Asher Ng Daniel Lau Hayden Lim
Nanyang Girls' High School	Caren Hui
<i>TopS</i>	Neo Yi Xin Tan Jia Shuen Maegan Ang Yan Lin
NUS High School of Mathematics and Science	Chia Vui Leong
<i>The prisoner hat problem</i>	Johnson Kathiravan Leong Jiandi Nathanael
Paya Lebar Methodist Girls' School (Secondary)	Wong Khai Yu
<i>Classroom arrangement</i>	Seet Seow Chee Soon Hui En Sarah Lum Jie Qi Steffi

## 2. SENIOR SECTION

**Gold Medal with Excellent Presentation.**

School/Project Title	Supervisor/Student(s)
NUS High School of Mathematics and Science	Lee Chan Lye
<i>Sum of cubes equal to squares of sums</i>	Andrew Yapp Wei Rong Gnoh Cheng Yi
NUS High School of Mathematics and Science	Lee Tuo Yeong
<i>A refinement of Young's inequality</i>	Raghavendra Narayan Rao

**Silver Medal.**

School/Project Title	Supervisor/Student(s)
Hwa Chong Institution	Chen Zenghui
<i>Ordered Randomness</i>	Lee Qixiu Galen Loh Yan Xun Timothy Benson Lin Zhan Li
Hwa Chong Institution	Zong Lixing
<i>Ping-pong mathlete</i>	Wang Ningli Chen Tianhao Mao Wenda

**Bronze Medal.**

School/Project Title	Supervisor/Student(s)
Dunman High School	Khoo Geok Hwa
<i>Measuring congestion in Mass Rapid System in Singapore</i>	Lim Li Fan Levant Poh Say Keong Chan Jia Le Kevin Liao Shih-Wei
Catholic High School	Chng Xun Qi Tay Kew Yeow Glenn
<i>Getting a billiard ball from point A to B</i> — <i>The Math behind playing pool</i>	Lee Keng Yan Lau Yu Yang Aidan Keith Tan Jia Jun Noah Chia Yu Shiuan
Clementi Town Secondary School	Zulhilmi Bin Zulkiflee
<i>Spectrum squares</i>	Sun Zihao Michelle Jamie Zhang Yu Xiao Liyang
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**Bronze Medal.** (Continued)

Commonwealth Secondary School <i>Marion Walter's theorem</i>	Eugene Lee <i>Zhang Hanwen</i> <i>Nyan Lin Htet</i>
Hwa Chong Institution <i>One touch drawing</i>	Zong Lixing <i>Lim An Jun</i> <i>Luo Ling Ke</i> <i>Ng Yu Peng</i> <i>Shi Cheng</i>
Nanyang Girls' High School <i>What happens on the Cartesian plane</i>	Elizabeth Liow <i>Wang Yihan</i>
NUS High School of Mathematics and Science <i>A new lower bound for Young's cosine series</i>	Lee Tuo Yeong <i>Jolie Fong Zhi Yi</i> <i>Wong Pei Xian</i>
NUS High School of Mathematics and Science <i>Optimising a vase</i>	Wang Haibin <i>Tay Fu Wen</i> <i>Toh Ming Chun</i>

**Honourable Mention with Excellent Presentation.**

School/Project Title	Supervisor/Student(s)
Anderson Secondary School <i>Walking in the rain</i>	Mohamed Alfin H R <i>Hao Zeyu</i> <i>Lian Weixiang</i> <i>Liao Siyu</i> <i>Tran Hieu Ngha</i>
Victoria School <i>Investigating the relationship between real and imaginary components of Julia sets on its fractal dimension</i>	Leon Huai Luu <i>Lim Zhao Xun Jerrell</i> <i>Anuj Govinda Rao</i>

**Honourable Mention.**

School/Project Title	Supervisor/Student(s)
Catholic High School <i>Modelling surface textures from light ray reflections</i>	Lim Seah Swee Khim <i>Nicholas Gan Kai Xin</i> <i>Chiang Kai Jing Colin Adam</i> <i>Asher Tan Shih</i> <i>Matthias Teng Yu Hern</i>

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**Honourable Mention.** (Continued)

School/Project Title	Supervisor/Student(s)
Hwa Chong Institution	Ang Lai Chiang
<i>Square peg problem</i>	<i>Teoh Jun Jie</i> <i>Foo Shi Hong</i> <i>Teow Hua Jun</i>
NUS High School of Mathematics and Science	Lee Tuo Yeong
<i>Chebyshev's polynomials and their applications</i>	<i>Marvell Ung Wew</i> <i>Tang Shun</i> <i>Zhang Chi</i>
Paya Lebar Methodist Girls' School (Secondary)	Kok Lai Fong
<i>Inscribed square problem</i>	<i>Regina Limanta</i> <i>Sun Jia Yee Joyce</i> <i>Renee Chiam Sin Yuen</i> <i>Lam Gi Ching Faith</i>
School of Science and Technology	Chen Jinqun
<i>Investigating of the scoring system of decathlons</i>	<i>Lim Yi Zhen</i> <i>Grace Cahyadi</i> <i>Brandon Gee</i> <i>Brendan Lee Shi He</i>
Victoria School	Leon Huai Luu
<i>A modification of screen space ambient occlusion with quasi monte Carlo integration</i>	<i>Anuj Govinda Rao</i> <i>Jerrell Lim Zhao Xun</i>
Hwa Chong Institution	Ang Lai Chiang
<i>The investigation of the Pappus chain theorem through inversion</i>	<i>Scott Loo Yi He</i> <i>Ng Kai Jie</i> <i>Tan Zhi Heng</i>